AVerMedia[®] Central Management System

User Manual

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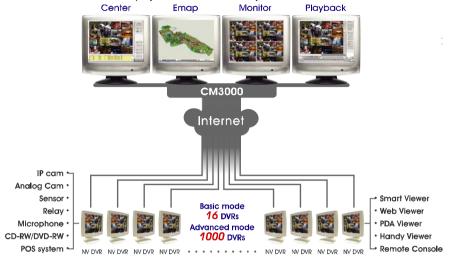
TABLE OF CONTENTS

СНА	PTER	1 INTRODUCTION	1
1.1	Upgra	ade the BASIC mode to ADVANCED mode	2
1.2	Dual	Monitors setting	2
	1.2.1	Graphic card with ATi chipset	2
	1.2.2	Graphic card with NVIDIA chipset	4
СНА	PTER 2	2 SOFTWARE INSTALLATION	5
2.1	Minim	num System Requirements	5
2.2	Instal	ling the CM3000 Software in Windows XP/2000	6
СНА	PTER :	3 USING THE CM3000	7
3.1	Runn	ing the CM3000 Software	7
3.2	Using	the CMS Application	7
3.3	Using	the MiniCenter Viewer	10
3.4	Remo	ote Bakup	12
3.5	Remo	ote Setup	13
	3.5.1	System Setting	14
	3.5.2	Camera Setting	16
	3.5.3	Record Setting	17
	3.5.4	Network Setting	
	3.5.5	Schedule Setting	
	3.5.6	Alarm Setting	22
3.6	Using	the MiniCenter PTZ Camera Controller	
СНА	PTER 4		
4.1	Syste	m Setting	
	4.1.1	Using System Controller	
	4.1	.1.1 General	32
	4.1	.1.2 Center Control	
		.1.3 Playback Mode	
	4.1	.1.4 E-Map Control	
		.1.5 Monitor Control	
		.1.6 PTZ Control	
4.2		Setup	
	4.2.1	To Add and Remove DVR Server	
4.3		era Setup	
4.4	Sche	dule Setup	45

	4.4.1	To set schedule at a specific portion of time in that hour:	46	
4.5	Backup Setup47			
4.6	E-MA	AP Setup	49	
	4.6.1	To Set Up the E-Map	49	
	4.6	.1.1 Add a New Map	50	
	4.6	.1.2 Add a DVR Server	51	
	4.6.2	To Use the E-Map	52	
4.7	Alarn	n Setting	53	
	4.7.1	To setup an alarm condition	53	
	4.7	.1.1 To Setup the Call Out List	54	
	4.7	.1.2 To Setup the Send E-Mail Setting	55	
	4.7	.1.3 To Set the MMS/SMS Setting	56	
	4.7	.1.4 Launch program	56	
	4.7	.1.5 Popup Video	57	
4.8	User	Setting	59	
СНА	PTER	5 USING THE PLAYBACK FUNCTION	.60	
5.1	To Pl	ayback the video	60	
5.2	Using	the Local Playback Application	62	
5.3	Using	the Download and Playback Application	64	
5.4	Using	the RealTime Playback Application	66	
5.5	To Cu	ut and Save the Wanted Portion of the Recorded Video	68	
5.6	To Se	earch Using the Visual Search	68	
5.7	To Se	earch Using the Event Search	69	
5.8	To Se	earch Using the Intelligent Search	70	
CHA	PTER	6 USING THE EVENT VIEWER	.71	

Chapter 1 Introduction

The AVerMedia[®] CM3000 is a central monitoring system that enables user to monitor up to 1000 DVR servers in advanced mode (see<u>1.1</u>) through an internet connection. Like the DVR program, the CMS system also automatically records and displays video when an event has occurred on the remote side of the DVR server. You can also playback video files locally or download from a remote DVR server.



The CMS system Supports Single, Dual, Triple and Four monitor displays. User can operate the CMS system application on different monitors.



1.1 Upgrade the BASIC mode to ADVANCED mode

The CM3000 has two operating modes – Basic and Advanced mode. In Basic mode, users only can monitor 16 remote DVR servers. With the Advanced mode, users can monitor up to 1000 remote DVR servers

Please follow the below steps to upgrade the CM3000 from Basic mode to Advanced mode.

- Call your local distributor and purchase a copy of the ADVANCED license or download the BASIC mode from the Internet.
- Your local distributor will then issue you with a Password. (If you have purchased the ADVANCED mode CD, this password is located on the CD sleeve itself).
- The Password is only valid for one time and is tied to the PC hardware. Do not release the password to any third party.
- 4. Run the CM3000 program.
- 5. Click the exit button 'x' on the upper right corner of the CM3000 main screen.
- 6. Click About → Register (also see 3.2 # 1)
- On the Register dialog box, note down the Activation number. Send both the Activation number and Password to your distributor.
- 8. Your distributor will then issue you with a Serial Key, which is tied to Activation number.
- Go back to the Register screen and fill in the serial number from the distributor to upgrade the CM3000 to ADVANCED mode.



The BASIC mode and ADVANCED mode only differs in the number of DVR servers that can be monitored at the same time. You have the same functionalities on both products.

1.2 Dual Monitors setting

Video configuration is different for each different VGA chipsets. Please follow the steps below to setup the dual monitors display.

1.2.1 Graphic card with ATi chipset

1. Enter the ATI Catalyst Control Center, user can click the short-cut or right click on the screen.



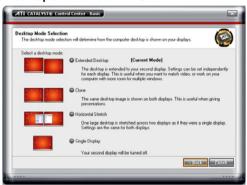
2. There are two modes to select — Basic and Advanced.



 If user selected Basic mode, press the Quick Settings tab. Then select the Select a different desktop mode and click Go.



4. Select the Extended Desktop and then click Finish.



- 5. If user selected the Advanced mode, click the **View** button.
- In Display Manager, right click on the second Display on the right side and select Extend Main onto monitor.



7. Adjust each monitor resolution to 1024x768 \cdot 1280x1024 ,1920x1200, 1440x900, or 1680x1050.

1.2.2 Graphic card with NVIDIA chipset

- 1. Click the NVIDIA nView, and select the **Dualview** mode.
- 2. Adjust each monitor resolution to 1024x768 \(\) 1280x1024 \(\),1920x1200 \(\), 1440x900 \(\), or 1680x1050.



3. To review if the display mode is correct, you can check the task bar. The task bar will show on the first monitor only.



Monitor 1 Monitor 2

Manual Conventions

The following conventions are used throughout this manual.



The caution symbol is intended to alert the user of the importance of the particular installation and operating instructions. Failure to comply may damage the system.



The information symbol is intended to provide additional information for the purpose of clarification.

Chapter 2 Software Installation

This chapter describes how to install the CM3000 software.



Before installing the software, make sure the Windows OS patches are up to date and the video graphic card driver is up to date.



To ensure you have the latest copy of the CM3000 software, download the updated version from the following site:

Worldwide:

http://www.avermedia.com/cgi-bin/support_download.asp

US/CANADA:

http:www.aver.com/security.html (click on Support → Download)

2.1 I	Minimum	System	Requirements
-------	---------	--------	--------------

-		
First,	must verify if the co	emputer meets the minimum system requirements.
	CPU	: Pentium® 4 3.0GHz or above recommended
	os	: Windows 2000 / XP Professional / Vista
	RAM	: 512MB for dual display,1GB for Quad display
	Hard disk	: 120GB or higher
	Media	: CD-ROM drive
	VGA	: 32-bit high color SVGA graphics card with 128MB video memory and
Ш		DirectDraw® / YUV Rendering Capability
	Audio	: Sound card and speakers
	Internet capacity	:10/100 Base-T Ethernet card or Gigabit Ethernet

2.2 Installing the CM3000 Software in Windows XP/2000

 Place the installation CD into the CD-ROM drive then click Install CM3000. And follow the onscreen instructions.



 Please carefully read the license agreement. Click Yes to accept the agreement.



3. Enter the administrator ID and password.



4. Click Finish.

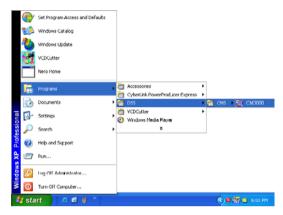


5. User may now run the CMS program. To run the application, click on your PC desktop or click Start>Programs >DSS>CMS > CM3000.

Chapter 3 Using the CM3000

3.1 Running the CM3000 Software

To run the application, double-click on your PC desktop or click **Start** > **Programs** > **DSS** > **CMS** > **CM3000**.



For security purposes, some of the features would require you to enter a User ID and Password before they can be accessed. When the Authorization dialog box appears, key in your User ID and Password. (If this is the first time, enter the one you have registered when installing the software.)

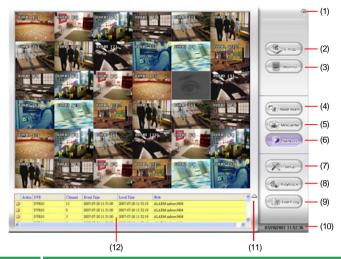


3.2 Using the CMS Application

When an alarm occurred on the DVR server, the video is transmitted to the CMS and played on the CM3000 main screen. The transmitted video is approximately 3 seconds long. You may download and playback the complete video directly from the DVR server by clicking on the event log. <u>Make sure the main DVR server is set to send video to the CMS when an alarm has occurred.</u>

The video stream before the eye indicates the latest occurrence. Also, there is a red frame which indicates the latest occurrence.





Name

Function

(1) Exit

Call up the Logout dialog box.

In the logout dialog box, you may do the following:



- Click Exit to close the CMS program. Only the administrator is authorized to access this command.
- Click Login to sign-in as a different user.
- Click Minimize to reduce the CM3000 to taskbar button.
- Click Cancel to close the Logout dialog box.
- Click About to find out more about the software and register the CMS application. Click Register to call out the registration window. Enter the serial number in the Serial number column and click OK to complete the registration.





Name

Function

(1) Exit

 Click Update in Register window to upgrade the newest CM3000 application. For more detail, please contact your local sales dealer.







- Once registration is completed, the CMS application will upgrade to ADVANCED mode and can monitor up to 1000 DVR servers.
- Without the registration, CMS application is operating in BASIC mode and can only monitor 16 DVR servers.
- How to upgrade to ADVANCED mode, please refer to 1.1.

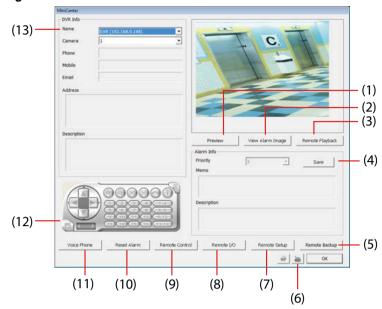
	10 71			
(2) E-map (F3)	Switch to display the map and show the location of the DVR server on the map. If you are using a single monitor, press ESC to revert back to the CMS main application.			
(3) Monitor (F4)	Switch to display live video from the selected DVR servers group. If user is using a single monitor, press ESC to revert back to the CMS main application.			
(4) Reset Alarm	Click to reset all DVR alarm status			
(5) MiniCenter Viewer	To call out the MiniCenter viewer. Also, user can double click on screen or alarm event to call out the MiniCenter Viewer. (Also refer to Chapter 3.3)			
(6) Network	Enable/disable the remote alarm data received. This is activated automatically when the CMS software starts up.			
(7) Setup	Configure the CMS system settings. Only the administrator is authorized to access this command. (see also Chapter 4)			
(8) Playback	Select to playback video from the local hard disk or remote DVR server.			
(9) Event log	Show a record of activities that has taken place in the system (see also Chapter 6).			
(10) Status	Display the current date, and time			
(11) Log extender	Expand and reduce the log viewer			
(12) Log viewer	List the entire info in event mode or text mode from all DVR servers.			



There are a few Hot keys for quick switching between the different applications or display mode on a single monitor system.

- F1: displays current DVR server information on the CMS Monitor screen
- F3: Switches to E-Map mode
- F4: Switches to Monitor mode
- Esc: Switches back to the CMS application main screen

3.3 Using the MiniCenter Viewer



Name Function

(1) Preview

View live video. User can cancel the connection by clicking **Disconnect** button if the connecting time is too long.



- (2) View Alarm Image
- Playback the alarm video clip that is stored on the local hard disk.
- (3) Remote Playback

Set the amount of time before and after the event to be retrieved from the DVR server. Click **OK** to accept and play the retrieved video and **Cancel** to void the request (see also <u>Chapter 5.3</u>)



(4) Alarm Info

Display alarm event information which it was defined on DVR server. User can select priority of alarm event and click **Save** button to save the setting.

(5) Remote Backup

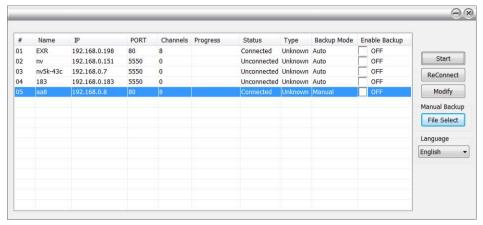
Remote Backup is purely for backing up the *.dvr file from the NV DVR sever(see also Chapter 3.4)

(6) On Screen Keyboard If the keyboard is not available, you may use the Virtual Keyboard.

Nan	ne	Function		
(7) Remote Setup		Change the NV DVR server settings(see also Chapter 3.5)		
(8)	Remote I/O	To view sensor and relay, also to turn on/off relay on remote DVR. Select the relay and right click to turn on /off or trigger the relay. Relay Old Sensor Old Sensor		
(9)	Remote Control	Connect to the remote DVR server and operate the application. Select the DVR server from the Name drag down list and click the Remote Control button. To use this feature, make sure the DVR remote server is enabled. For more details on software usage, please refer to the DVR user manual. This feature works with NV series v 5.7 above only.		
(10)	Reset Alarm	Clear the DVR server alarm list.		
(11) Voice Phone		Enable/disable 2-way audio function. This function allows the CMS and DVR server to talk via the internet using a MIC. Make sure your microphone and speakers work before using this function. If the DVR server Talk to web-client setting is disabled, you will not be able to hear from the other side		
(12)	PTZ Control	Control the PTZ camera (see also Chapter 3.6).		
switch to view different DVR or camera by drag down the Name		Display the DVR information that user has select to preview. User can switch to view different DVR or camera by drag down the Name or camera list. Phone, Address, Mobile, Email, and Description information were defined when set up the DVR server.		

3.4 Remote Bakup

Remote Backup is purely for backing up the *.dvr file from the NV DVR sever. You can select between Auto Backup and Manual Backup. Auto Backup continuously archives one hour of the recorded data at a time, starting from the specified date. As for Manual Backup, it only archives the recorded data of selected date.

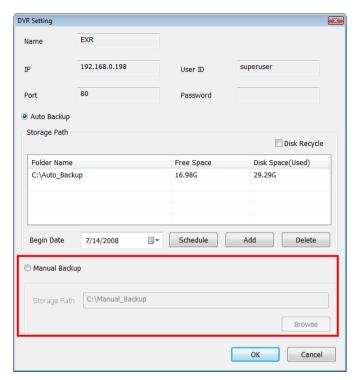


Auto Backup:

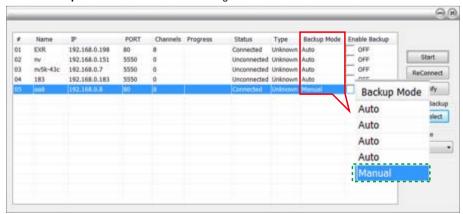
- Click Remote backup button from Minicenter UI.
- 2. The Remote backup windows will show up and list all added DVR servers.
- Make sure CMS is connecting to DVR servers. If lost the connection with DVR server, select the DVR server and click Reconnect button.
- Select the DVR server that user wants to backup by marking the Enable Backup check box. The
 marked Enable Backup will change to ON status.
- 5. And then, the CMS will start to backup.

Manual Backup:

- 1. Click Remote backup button from Minicenter UI.
- 2. Select the DVR server and click **Modify** button.
- Select the Manual Backup at DVR setting dialog. And, user can change the backup direction by clicking Browse button.
- 4. And the, click **OK** to save the setting.



5. The Backup Mode of DVR server will change to Manual.



- To execute manual backup, select the file first. Click File Select and select the files that user wants to backup and click OK.
- 7. And then, click Start to backup.

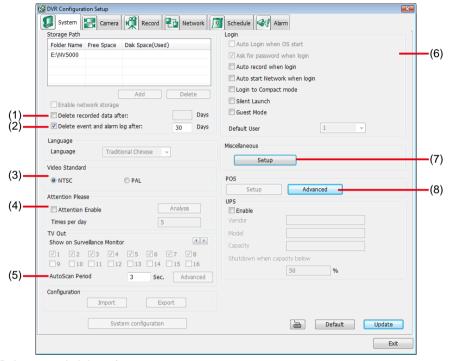
3.5 Remote Setup

Remote Setup is configuring DVR server from remote site.

Click the **Remote Setup** button to call out the DVR server setup windows.

3.5.1 System Setting

Click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Delete recorded data after

If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the numbers of days in **Days** text box.

(2) Delete event and alarm log after

If you want the system to automatically erase the event and alarm log files after a certain days, enable the **Delete event and alarm log after** check box and enter the numbers of days in **Days** text box.

(3) Video Standard

Change and select the proper video system according to your camera video system. If the video system setting is wrong, the video would appear abnormal.

(4) Attention Please

Check the attentiveness of the person who is monitoring the system. You may set the number of times the Attention dialog box to appear in a day in **Times per day** text box. When this feature is enabled, the **Attention** dialog box would appear. The person who is monitoring the system must enter the same number that appears from the left box at the right text box and then click **OK**.

5) TV Out

- AutoScan Period

Set the display time gap from 3 to 10 sec. before it switches to the next camera.

(6) Login

Enable the conditions in Login section you want the system to automatically carry out.

Auto record when login

Automatically start video recording when the NV DVR is executed.

Auto start Network when login

Automatically connect to network when the NV DVR is executed.

- Login to compact mode

Switch to compact mode directly when the NV DVR is executed.

- Silent Launch

Enable the DVR system minimizes on the system tray automatically right after start up.

- Guest Mode

Automatically log in Guest mode when the NV DVR is executed. In guest mode, the functions are limited to preview and playback only.

(7) Miscellaneous

Enable the conditions in **Miscellaneous** section you want the system to perform.

- Desktop Lock

Deactivate the [Ctrl-Alt-Del] and [Windows] keyboard key functions.

- Beep if no signal

Make sound when the video signal is lost.

- Mandatory Record

Always record video when software is running

- Screen Saver

Set a period time to enter screen saver mode when system idle.

- Auto Scan Period

Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap

- Playback Mode

Select the mode of playback the video.

Select date and time: Select the date and time which user wants to playback.

Play the last file: Automatically playback the video from the last hour

Instant Playback: Automatically playback the video which has just recorded

- Date Format

Select the date format which wants to display in Select date and time playback mode



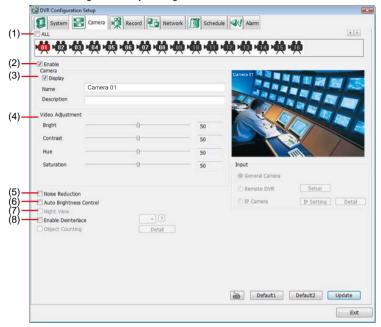
(8) POS

Set from which camera screen to display the data from the POS equipment. To set the text flow and color format, click **Advanced**.



3.5.2 Camera Setting

Click **Update** to save and apply the new settings, click **Exit** to exit without saving, and click **Default1/ Default2** to revert back to original factory setting.



(1) Camera Icons

Select the camera number you want to adjust the video setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, Right click on the camera icon. To select one camera only, Left click on the camera icon. The camera icon turns red when it is selected.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Camera

- Display

Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.

- Name

Change the camera name.

- Description

Add a short comment.

(4) Video Adjustment

Adjust the Brightness, Contrast, Hue and Saturation of the selected camera.

(5) Noise Reduction

Reduce undesirable video signal and improve the quality of the video.



Noise Reduction uses lots of CPU resource. Please use this feature only if it is really necessary.

(6) Auto Brightness Control

Automatically adjust the brightness.

(7) Night View

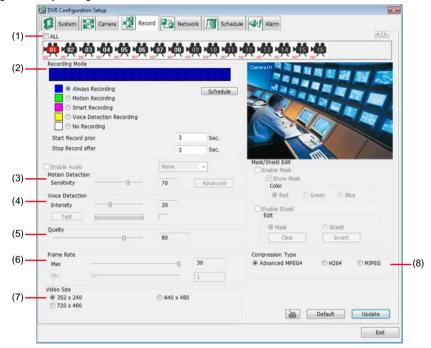
Automatically adjust the exposure to make the image more visible especially when the site is dark. You can only use this function when the *Auto Brightness Control is enabled*.



Deinterlace doesn't support on EB DVR series.

3.5.3 Record Setting

Click **OK** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns red when it is selected.

(2) Recording Mode

The blocks from 00 to 23 represent the time in 24-hour clock. To record in full 24 hours, select the recording mode and click the ⊙ button. If you want to only record at a particular time, click the colored block beside the recording mode then click on the time blocks. When the system starts recording a red triangle mark would appear at the upper left corner of the screen. The recording modes are listed below:

- Always Recording

Record the video from the selected camera and save it to the designated storage path

Motion Recording

Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.

- Smart Recording

Automatically switch to recorded at the maximum frame rate setting once a motion is detected and if there is no motion, it records at the minimum frame rate setting. Set the maximum and minimum frame rate setting in (5) Frame Rate section.

- No Recording

The system won't do any recording.

(3) Motion Detection

Adjust the sensitivity of the motion detector. The higher the value, the finer the sensitivity is detected. When it detects a motion, a green triangle mark would appear at the upper left corner of the screen.

(4) Voice Detection

Adjust the intensity of the audio detector. The system detects sound when it exceeds the intensity value.

(5) Quality

Adjust the video quality. The higher the value, the lower the compression level and uses more hard disk space.

(6) Frame Rate

Set the maximum number of frames to be recorded during motion and motionless state. The frame rate ranges from 1 to 30 for NTSC and 1 to 25 for PAL. The higher the frame rate, it uses more hard disk space.

(7) Video Size

User can activate the **Enable Deinterlace** to enhance the video quality. Set the **Enable Deinterlace** mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

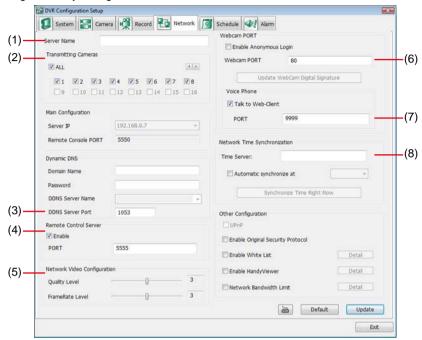
(8) Compression Type

User can refer the table below to check the NV card supports what type of compression. H264 is the latest and advanced video compression format that delivers better video quality and smaller file size but this uses more CPU resource. Advanced MPEG4 and MJPEG, both provide a standard for color picture compression rate. MPEG4 uses higher compression rate and smaller file size. While MJPEG uses slightly lower compression rate and bigger file size.

	MPEG4	MPEG 4 Encryption	H264	MJPG
NV 3000	✓	✓	✓	✓
NV 5000	✓	✓	✓	✓
NV 6000	✓	✓		
NV 6000 Express	✓	✓		
NV 7000H			✓	

3.5.4 Network Setting

Click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Server Name

Assign a name for the DVR unit. Letters of the alphabet and numbers only.

(2) Transmitting Cameras

Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using WebCam, Remote Console, PDA Viewer and Hand Viewer (still image). To select all the cameras, enable the **ALL** check box.

(3) DDNS Server Port

Enter the port that is used to connect the DDNS server.

(4) Remote Control Server

Enable/disable remote control from remote application (ex. CM3000). Enter the remote accessing port in **Port** column. The default value is 5555.

(5) Network Video Configuration

Set up the video quality and frame rate for viewing and transmitting to the remote program. Scrolling adjust bar to set the **Quality level** and **FrameRate level**.

(6) WebViewer Configuration

Activate **Enable Anonymous Login** to remotely access the DVR server without the need of password

(7) Voice Phone The Talk to Web-Client is to use the 2-Way Talk feature that allows the client and server to talk via

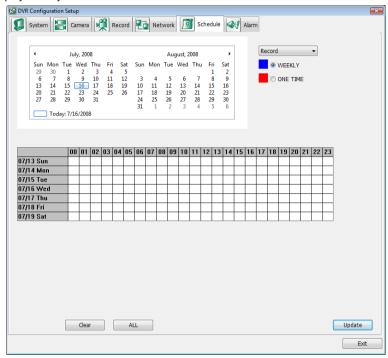
internet using microphone. Make sure both microphone and speakers work before using this feature. If the **Talk to Web-Client** is disabled, the person in the NV DVR server side can only hear the voice from the client side that is when the WebCam 2-Way Talk button is activated.

(8) Network Time Synchronization

Adjust the NV DVR system time same as network time server. Fill in the **Time Server** IP address or domain name. Select **Automatic Synchronize** time to set automatic synchronize time on a daily basis. Or, user can click **Synchronize Time Right Now** to adjust time right away.

3.5.5 Schedule Setting

Schedule to record, backup, enable network, reboot and disable alarm of all the cameras either weekly or one time. The number from 00 to 23 represent the time in 24-hour clock. The left most column display the days in a week.



To Set the Schedule Setting:

- 1. Select the date in the calendar. Use 1 and 1 buttons to shift the calendar to the left or right.
- 2. Select the condition you want to schedule in the drop down list.
 - Record

Activate all the cameras to start video recording at the set time based on the Recording setting

- Backup

Save another copy of all the data at the set time and specified backup path. NV DVR automatically updates and only backup the data that are not yet included in the archive. To assign backup path, click



Make sure the backup folder and storage folder are not on the same drive.

Enable Network

Activate NV DVR remote system to access at the set time. After the appointed time, the Network function will be disabled. If the Network function is already enabled, the Network function will not be disabled when the appointed time has ended.

- Reboot

Restart the PC at the appointed time.



Make sure the Windows operating system is set **NOT** to require you to login user name and password. This way the system will be able to run NV DVR program.

Disable Alarm

Deactivate the alarm at the set time temporarily.

- Turn on Relay

Active the Relay at the set time. If there are no Relays are connected, Turn on Relay # function will not display in drag down list. The Relay number will depend on how many Relays are connected

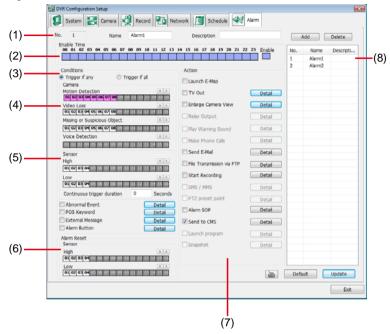
- 3. Specify to either schedule it weekly or one time. Click ⊙ to make a selection.
- 4. Click on the blocks to set the schedule. Or click **All** to select all. To store the setting, click **Save**. To remove the settings, click **Clear**.



To end Schedule Setting, click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

3.5.6 Alarm Setting

click **Add** to insert and set new alarm setting, click **Delete** to remove the selected alarm setting, click **OK** to exit and save the setting, **Cancel** to exit without saving, and **Default** to revert back to original factory setting.



To set the Alarm Setting:

- Click Add to insert and set a new alarm setting. Click the items in the (7) Alarm Setting List, if you want to modify the alarm setting.
- In (1) Alarm Setting number/Name/Description, display the selected alarm setting number in the list below. Enter alarm name and description.
- 3. In (2) Enable Time, the number from 00 to 23 represent the time in 24-hour clock. Select the time and click the block you want to activate or deactivate the alarm function. When it is deactivated the color of the block turns white.
- 4. In (3) Conditions, you can set "Trigger if any" to activate if it falls to one of the conditions or "Trigger if all" to activate if it falls to all conditions.
 - In Camera section, select and click on the camera number (01 to 16) in Motion Detected and Video Loss to set the condition for the system to alarm.
 - In Missing and Suspicious Object Detected, click the camera number (01 to 16) and select
 the certain object on the screen (right click on camera number for detailed setting)), and when
 the certain object is missing or doubtful, the system will alarm. (see also Chapter 5.9.12 of NV
 user's manual) In Scene Change, when the camera has been moved, the system will alarm,
 too.
 - In Voice Detection, click the camera number (01 to 16) to the system to alarm when detect the abnormal voice.
- 5. In (4) Sensor, select and click on the sensor number (use ◀ and ▶ to select the sensor) to set the condition for the system to alarm. If the sensor normal status is high, set the sensor condition to low.
 - Enable/disable the Abnormal Event check box, to set the condition of the event for system to alarm.
 - Normal Reboot: when the DVR system reboot without abnormal condition, the system will

- send out the alarm message.
- Abnormal Reboot: when the DVR system reboot in irregular condition, the system will send out the alarm message.
- Recording is switched off: when the recording has been stopped, the system will send
 out the alarm message.
- Network is switched off: when the network connection of DVR system is lost, the system will send out the alarm message.
- Hard Disk failed: when the hard disk can't work normally, the system will send out the alarm message.
- **Temperature:** set a temperature limited of system for system to alarm. When DVR system temperature is over the temperature limited, the system will send out the alarm.



Temperature setting only supports on NV6000 Express card.

Illegal Entry: any objects move between selected regions which user has set up in
 Object Counting section (see also Chapter 5.2.1 of NV user's manual), the system will
 send out the alarm. Select the entry (object moves from region 1 to 2 or from region 2 to 1)
 and camera for system alarm detection.



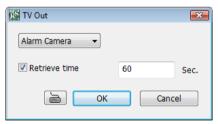
- Enable/disable the POS Keyword check box, to scan the data from the POS if it matches the keyword (see also <u>Chapter 5.9.10</u>).
- Enable/disable the Alarm Message check box, to active with external alarm message by your own program. For the detail configuration, please contact the local reseller.
- Enable/disable the Alarm Button check box, to active manual alarm function (see also Chapter 4.3#(17) of NV user's manual). To define alarm message of manually alarm trigger.
 Click alarm button and select the alarm button # and fill in the description of alarm button.



- 6. In (5) Alarm Reset, click the camera number (use ◀ and ▶ to select the alarm) to set the reset condition of alarm. Once alarm is reset, all alarm action will stop at the moment. If the sensor normal status is high, set the sensor condition to low.
- In (6) Action, you may now set the alarm action for the system to perform when the alarm condition is activated.
 - Launch E-Map
 Display mini Emap screen.
 - TV Out

Switch to only display the video on TV from where the alarm is activated.

- a. Select the camera from drop down list to specify which camera video to be displayed on TV when the alarm is triggered.
 - Alarm Camera: when a channel has an alarm occurred, and then, the channel video that has an alarm occurred will be displayed on TV.
 - ii. Camera #(1~32): select the camera channel video that wants to be displayed on TV when an alarm is activated.
- b. Retrieve time: set the waiting duration before system switching back to original display mode on TV automatically. If the retrieve time is un-mark, the alarm video will keep displaying until user switch back to normal display mode manually. The retrieve time range is 3~600 seconds.

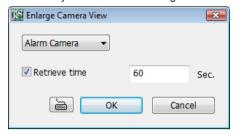


- Enlarge Camera View

Switch to only display video in Preview/Advanced mode from where the alarm is activated.

- Select the camera from drop down list to specify which camera video to be enlarged on screen when the alarm is triggered.
 - iii. Alarm Camera: when a channel has an alarm occurred, and then, the channel video that has an alarm occurred will be enlarged on screen.
 - iv. Camera # (1~32): the selected channel video that will be enlarged on screen when an alarm is activated.
- b. Retrieve time: set the waiting duration before system switching back to original Preview mode. If the retrieve time is un-mark, the alarm video will keep enlarging until user switch

back to Preview mode manually. The retrieve time range is 3~ 600 seconds.



- Send E-mail

Send an electronic text message.

Beside the Send Email check box, click **Detail**. In the E-mail Setting dialog box, click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.

(1) Mail Server

Enter the SMTP Server and port. If your e-mail system requires user identification, enable **Authentication** check box and enter User ID and Password.

(2) Mail

To check if it is working, click **Test Account** button.

From: Enter the sender e-mail address.

To and CC: Enter the recipient email address and separate it with comma or a semicolon (;).

Subject: Enter the message title. **Message:** Type the message.

(3) Email Notice Setting

- Notice Interval: Set the period of time before it sends another e-mail notice.
- Embedded image : Select the image size and set the number of frames.
- Attach image when sensor is triggered: When the sensor is triggered, the system
 will capture the image and send the image to the certain e-mail address with the alarm
 message.

(4) Modem Dial up Setting

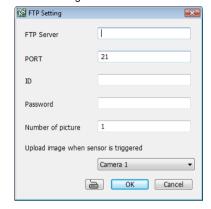
User may set the time to disconnect automatically, just enable the **Auto Disconnect after** check box and set time.



- File Transmission via FTP

Upload file to remote computer thru FTP (File Transfer Protocol).

- 1. Beside the File Transmission via FTP check box, click Detail.
- 2. In the FTP Setting dialog box, enter the FTP IP, port, user ID and password.
- 3. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



- Start Recording

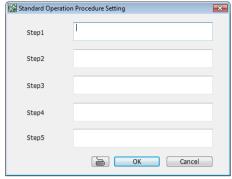
Record the video from the selected camera.

- 1. Beside the Start Recording check box, click **Detail**.
- In the Alarm Recording Setting dialog box, select the camera to enable/disable video recording. Enable All to select all cameras.
- In the Frame Rate selection, select As Setting to record the number of frames based on the Recording Setting or Max to record the maximum of frames based on the available speed.
- 4. In the Stop Recording after text box, set the number in second for the program to continue recording after the alarm has ended.
- 5. Click **OK** to accept the new settings and **Cancel** to exit without saving.



- Alarm SOP (Standard Operation Procedure)

List the instructions to inform the person of what to do when the alarm is activated. Beside the Alarm SOP check box, click **Detail**. In the step text boxes, type the standard protocol when the alarm is activated. When the alarm is activated, the Standard Operation Procedure dialog box will appear. Just click **Next** to see the next instruction, **Back** to see the previous instruction, **Finish** to end and **Abort** to terminate.

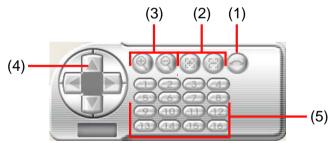


- Send to CMS (Central Management System)

Enable/disable the selected camera to send video to CMS when the alarm is activated. Beside the Send to CMS check box, click **Detail**. In the CMS Setting, select the camera to enable/disable sending the video to CMS. Enable **All** to select all cameras. Then, click **OK** to accept the new settings and **Cancel** to exit without saving.



3.6 Using the MiniCenter PTZ Camera Controller



пе	Function		
AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.		
Focus +/-	Adjust the focus manually to produce clearer image.		
Zoom +/-	Zoom in and out the image.		
Direction buttons	Adjust and position the focal point of the PTZ camera.		
Camera preset position number	Move the PTZ camera to the preset point.		
	AutoPan Focus +/- Zoom +/- Direction buttons Camera preset		

Chapter 4 Customizing the CMS System

In the CMS application, click the button to customize the CMS system. In the Authorization dialog box, enter the administrator User ID and Password.

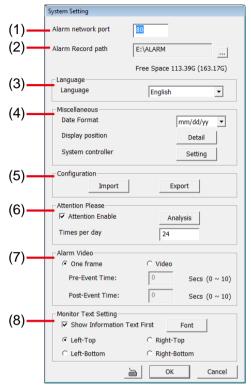


When the CMS configuration setup selection appears, select and click the buttons you want to change the setting.



4.1 System Setting

In the System Setting dialog box, click **OK** to accept and start to reload the new setting, and **Cancel** to exit without saving.



(1) Alarm Network Port

Select a port for receiving alarm video from DVR server. Any network service port can be assigned as long as the port doesn't conflict with current network service.

(2) Alarm Record Path

By default, the alarm folder is automatically generated to where the CMS application is installed and for saving the alarm clip videos and log files. The suggested hard disk capacity for storing the alarm video is 30GB.

- Click Setup.
- 2. In the Authorization dialog box, enter the administrator User ID and Password.



4 The text below the Alarm Record path text box shows the hard disk free space and total space in parenthesis.



In the System Setting dialog box, click OK to start reloading the new setting and Cancel to 5. exit without saving the new setting.

(3) Language

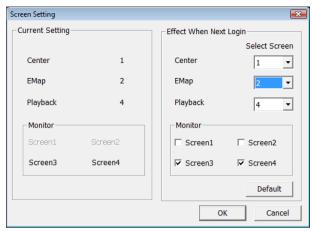
Customize the system to display the tool tips and dialogs based on the selected language. By default the set language is in English.

- 1. Click Setup.
- 2. In the Authorization dialog box, enter the administrator User ID and Password.
- 3. Click System.
- 4. In the Language drop down list, click and select the language.

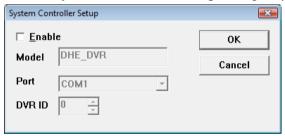
(4) Miscellaneous

1.

- Date Format Select from different date formats
- Click Setup. 2.
- In the Authorization dialog box, enter the administrator User ID and Password.
- 3. Click System.
- In the Date Format drop down list, click and select the style.
- In the System Setting dialog box, click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.
- Display position To decide the Center, Emap, Monitor, or Playback to be displayed on which screen. CMS system supports up to 4 monitors, users are allowed to customize the display position of different monitoring tool. Click **Detail** to select the display screen setting. The new screen display setting will be effect at next time login.



> System Controller – To configure the parameters that is for communicating with the System Controller (an optional accessory). Also please refer to Using System Controller or user manual of the System Controller. Click Setting to configure system controller.



Enable – Mark the check box to enable the System Controller function.

Model - Select model of the System Controller.

Port – Select the com port that is connected with the System Controller. Click **Setup** to configure com port value. The com port value is shown in below table:

Baud rate	9600
Data bits	8
Parity	No
Stop bit	1
Flow control	No

 ${\bf ID}$ – Set an ID for DVR server (0~99). This ID is a key for communicating between the System Controller and the DVR server.



When the DVR server ID is X, the DVR server can be controlled by System Controller irrespective of the DVR ID that is selected in System Controller.

4.1.1 Using System Controller

4.1.1.1 General

Function	Description
I√ / ESC	Exit the current mode.
RECORD	Switch control to monitor screen. Press + screen number (~
БМАР	Switch control to E-map screen
NETWORK	Switch control to Center screen
PREVIEW	Switch to view Monitor screens
PLAYBACK	To call out Playback application
1/	Number button 1
2/	Number button 2
3/	Number button 3
4/	Number button 4
5/	Number button 5
6/	Number button 6
7/1	Number button 7
8	Number button 8
9	Number button 9

Function	Description
0	Number Button 0
BNTER	An enter key for confirming a action

4.1.1.2 Center Control

Function	Description
ВМАР	Switch control to E-map screen
PREVIEW	Switch to view Monitor screens
	To reset alarm status
PLAYBACK	To call out Playback application
1/	Keyboard Number button 1
2/	Keyboard Number button 2
3/	Keyboard Number button 3
4/	Keyboard Number button 4
5/	Keyboard Number button 5
6/	Keyboard Number button 6
7/1	Keyboard Number button 7
8	Keyboard Number button 8
9	Keyboard Number button 9
°	Keyboard Number button 0

Description



An enter key for confirming a action

4.1.1.3 Playback Mode

7.1.1.3	1.1.5 Flayback Wode		
Function	Description		
	∆UP	Go up to the selection (DVR server, playback mode, playback time and playback date)	
	— — — — — — — — — — — — — — — — — — —	Go to previous frame while playback	
	✓ DOWN	Go down to the selection (DVR server, playback mode, playback time and playback date)	
		Go to next frame while playback	
	□ LEFT /	Use to select the playback time and date	
	V LLI 17	Wind back the recorded video file while playback	
		Use to select the playback time and date	
	▷ RIGHT	Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x	
	Turn Right: F	Play the record video file at the fast speed	
	Turn Left: Pla	ay the recorded video file at the speed of 1/2X, 1/4X, or 1/8X	
M / ESC	Move to the b	Move to the beginning of the recorded video file	
◀ / TAB	Wind back the	Wind back the recorded video file	
) /.	Play the reco	Play the recorded video file	
11/2	Pause playino	Pause playing the recorded video file	
> 1/←	Go to the end	of the recorded video file in Playback mode	
ENTER	An enter key	for confirming a action	
1/	channel 1		
	Switch to a 1	channel view mode	
2/	channel 2		
	Switch to a 4-	split screen mode	
3/	channel 3		
	Switch to a 9-	split screen mode	

Function	Description
4/	channel 4
	Switch to a 16-split screen mode
5/	channel 5
	Switch to a 8-split screen mode
6/	channel 6
	Switch to a 13-split screen mode
7/	channel 7
	Switch to a 32-split screen mode
8	channel 8
9	Channel 9
	Number Button 0
•	To select the channel 1~9, press 0 + channel number (1~9) or press channel (1~9) and wait about 1 second. To select channel 10~32, Press 2 digital channel numbers. For example: channel 10, press 1 + 0. To switch to split screen mode, please press to enter function mode first.
	Capture and save the screen shot either in *.jpg or *.bmp format in Playback mode
© / 17	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file in Playback. Move Joystick to left and right to select day and up and down to select hour.
≅/A-B	Keep a portion of the recorded video in Playback mode
©/ %	Save the segmented file in *.mpg, *.avi, or *.dvr format in Playback mode
<u> </u>	Exit from Playback application

4.1.1.4 E-Map Control

	2 map control
Function	Description
8	To exit from E-Map screen / DVR watch window
	Back up last level of E-Map
1/	Channel 1 in DVR watch
2/	Channel 2 in DVR watch
3/	Channel 3 in DVR watch
4/	Channel 4 in DVR watch
5/	Channel 5 in DVR watch
6/	Channel 6 in DVR watch
7 /	Channel 7 in DVR watch
8	Channel 8 in DVR watch
9	Channel 9 in DVR watch
0	Number Button 0
A	- To select the channel 1~9, press 0 + channel number (1~9) or press channel



- To select the channel 1~9, press 0 + channel number (1~9) or press channel (1~9) and wait about 1 second.
- To select channel 10~32, Press **2** digital channel numbers. For example: channel 10, press 1 + 0. \mathbf{M}/\mathbb{R}
- Press (ESC) to back to split mode from single channel view mode.



 \triangleleft Left / \triangleright Right \triangle UP / \triangledown DOWN

To select different DVR server on the E-map to view or select next level of E-map to view.

(enter)

To confirm the selection, press

button, and then, the DVR watch window will show up or the next E-map will show up.

4.1.1.5 Monitor Control

4.1.1.5	Monitor Control
Function	Description
	To exit from Monitor screen
1/	Channel 1
2/	Channel 2
3/	Channel 3
4/	Channel 4
5/	Channel 5
6/	Channel 6
7/1	Channel 7
8	Channel 8
9	Channel 9
0	Number Button 0
0	To select the channel 1~9, press 0 + channel number (1~9) or press channel (1~9) and wait about 1 second. To select channel 10~32, Press 2 digital channel numbers. For example: channel 10, press 1 + 0.
	Press (ESC) to back to split mode from single channel view mode.
◀ / TAB	+ 3 digital numbers can switch to different monitor set. CMS
	system can support 128 monitor set. User can press + monitor set
_	number (001 ~ 128), and then, the monitor screen will show the entered monitor set.

4.1.1.6 PTZ Control

Function	Description
<u> </u>	Description
	Adjust the focus in manually
€ / 1	To speed up the movement of camera
∺ /A-B	Adjust the focus out manually
©/ %	To speed down the movement of camera
	Move to PTZ preset position
A	Move to PTZ preset position 1~9, press + number button (1~9) and wait
U	
	about 1 second.
-	Move to PTZ preset position 10~16, Press + 2 digital numbers button. For
	example: preset position number 10, press + 1 + 0.
_	Please press button each time before press PTZ preset position number
	button.
1/	
	Keyboard Number button 1
2/	Keyboard Number button 2
3/	Keyboard Number button 3
4/	Keyboard Number button 4
5/	Keyboard Number button 5
6/	Keyboard Number button 6
7/1	Keyboard Number button 7
8	Keyboard Number button 8

Function	Description	
9	Keyboard Number button 9	
0	Keyboard Number button 0	
	Δ UP / ∇ DOWN Tilt up and down	
	Turn Right: Zoom in the image	
	Turn Left: Zoom out the image	

(5) Configuration

Import / Export the CMS system configuration

(6) Attention Please

Check the attentiveness of the person who is monitoring the system. You may set the number of times the Attention dialog box to appear in a day in **Times per day** text box. To check the graph on how fast the person response, click **Analysis**. When this feature is enabled, the **Attention** dialog box would appear. The person who is monitoring the system must enter the same number that appears from the left box at the right text box and then click **OK**.



(7) Alarm Video

Set up the video transition when alarm occurs.

- One frame: a single video frame will be transmitted when alarm occurs.
- Pre/Post Event Time: Set the video duration before and after the event to send

(8) Monitor Text Setting

Enable/disable the camera information display and display position on the monitor screen.

4.2 DVR Setup

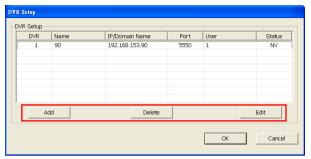
Display the list of all DVR servers. User may add up to 1000 DVR servers, delete and modify the DVR setting.



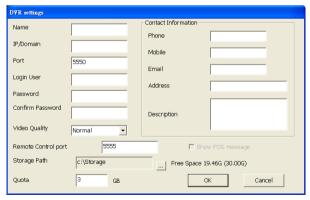
- In ADVANCED mode, user can add up to 1000 DVR servers(see 1.1)
- In BASIC mode, user only can add 16 DVR servers

4.2.1 To Add and Remove DVR Server

- 1. Click Setup.
- 2. In the Authorization dialog box, enter the administrator User ID and Password.
- Click DVR.
- In the DVR Setup section, click Add to insert, Delete to remove and Edit to modify DVR server setting.



- To continue adding a DVR, in the text box, enter the name, IP/Domain, Login User, Password, Confirm Password of the remote DVR server.
- 6. If necessary, fill up the contact information to let the personnel in the CMS side know whom to get in touch with when an event has occurred.
- Select the Video Quality for video display on the CMS system monitor screen. When the video quality is high, user can enable Show POS message box and the POS message will also display on the CMS system monitor screen.
- Set the Storage Path for saving the recorded video data of the selected cameras on the Monitor screen.
- Set the max video recorded storage capacity of this DVR server on the CMS system server.
 Enter the value in Quota.

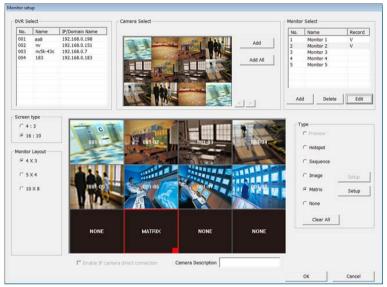


- In the DVR Setting dialog box, click OK to accept the new setting and Cancel to exit without saving the new setting.
- 11. The CMS system will connect to DVR server. If the connecting time takes too long, user can click **Disconnect** button to cancel the connect action.

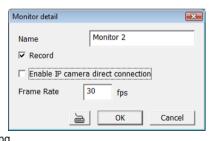


4.3 Camera Setup

Select the camera from different DVR servers in order to monitor on same screen. The selected cameras will be played on **Monitor** screen (see 3.2 # 2).



- 1. Click Setup.
- 2. In the Authorization dialog box, enter the administrator User ID and Password.
- 3. Click Camera.
- 4. Click **Add** to create a monitor set. The monitor set can be added up to 8 monitor set. Enter a name in **Name** column (12 characters only). To record the cameras video, mark the **Record** box. Otherwise, the cameras video will not be saved on the CMS system hard disk. Mark the **Enable IP camera direct connection** that CMS will receive the camera video direct from IP camera which will reduce the loading of DVR server. User can set the camera transmitting **Frame Rate**, but the real transmitting frame rate depends on camera setting. Click **OK** to save the setting.

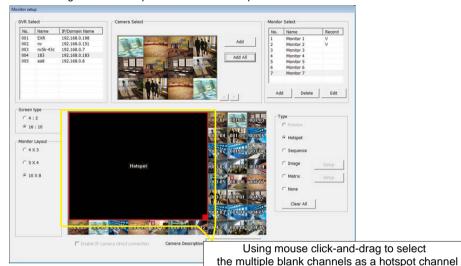


- After the Monitor set has been created, select the DVR server. And then the camera channels of the DVR server will display on the **Camera Select** window. User can combines different cameras from different DVR servers as a monitor set. And all camera channels can be selected by different Monitor set raptly.
- 6. User can depend on the monitor size to select the screen type **4:3** (regular screen monitor) or **16:10** (width screen monitor). The 4:3 and 16:10 screen type support different monitor layout.
- 7. Select the camera that user wants to add, and then click Add button. The selected camera channel will be added to Monitor Layout window. User can add up to 64 cameras in 4:3 screen type and 80 cameras in 16:10 screen type. To remove the camera from the Monitor Layout window, select the camera and click Delete button. To delete all cameras, click Clear All button. User can enter a description for a channel. Click a camera in Monitor Layout window and enter the description in Camera Description. The camera description will display on the channel of the monitor screen.



User can click-and-drag the camera channel to Monitor Layout window without using **Add** button.

- In Monitor Layout window, user also can set the channel for specific type functions instead of added camera channels from DVR servers. In Monitor Layout window, select one of blank channel (NONE) and click the radio button of type (Hotspot, Sequence, Matrix, Image, or None).
 - Hotspot: To set the channel for displaying selected camera channel video. User can clickand-drag to select multiple channels as a hotspot channel area.



In the Monitor screen, user can click-and-drag the one camera channel to the hotspot channel for enlarge view.



- Sequence: Set the selected channel to automatically switch to display all camera channels in cycle.
- Matrix: set the selected channel to receive and display the alarm event from selected DVR servers. Click Setup to select the DVR servers. Enable the Retrieve time to set a period

time (0 ~ 255 sec) for alarm event to display. If the retrieve time doesn't enable, the alarm event will display on screen until next alarm event come in.



On the DVR site, user need to enable and configure the matrix to send to CMS (please refer to *Alarm Setting* of NV/SA/NX user's manual).

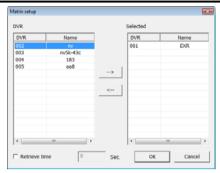
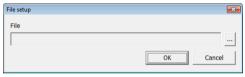
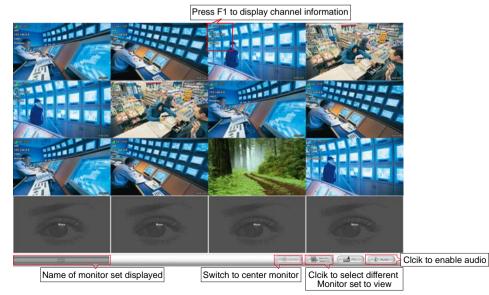
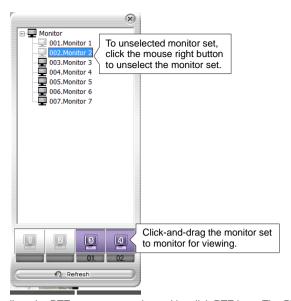


Image: To insert an image on selected channel. The image supports *.bmp and *.jpg format.
 Click Setup and browse where the image located is.



- 9. Click **OK** to save the setup. To exit without saving, click **Cancel**.
- To delete the monitor set, select the monitor set in Monitor Select windows and click Delete button.
- To modify the monitor set, select the monitor set in Monitor Select windows and click Edit button.
- 12. To viewer different monitor set, click Monitor Selector to switch to different Monitor set.





13. Also, user can call up the PTZ camera control panel by click **PTZ** icon. The PTZ icon will be available when there are PTZ cameras in Monitor set.



Clcik to enable PTZ control panel

14. In Monitor screen, user can click a channel to view in full screen. Press Esc to back to multiple channel screen.

4.4 Schedule Setup

Schedule to record, backup, enable network, reboot and disable alarm of all the cameras either weekly or one time. The number from 00 to 23 represent the time in 24-hour clock. The left most column display the days in a week.

Select the Monitor group for scheduling.





The Monitor set can be scheduled only when the recoding is enabling.

- 2. Select the date in the calendar. Use 1 and 1 buttons to shift the calendar to the left or right.
- 3. Select the condition you want to schedule in the drop down list.
 - Record

Activate all the cameras to start video recording at the set time based on the Recording setting

Backup

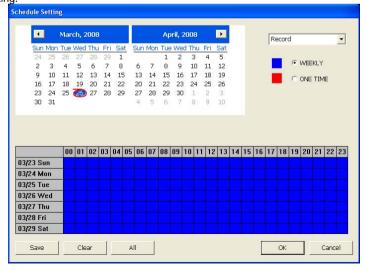
Save another copy of all the data at the set time and specified backup path. NV DVR automatically updates and only backup the data that are not yet included in the archive. To assign backup path, click _____.



Make sure the backup folder and storage folder are not on the same drive.

- Specify to either schedule it weekly or one time. Click

 on make a selection.
- 5. Click on the blocks to set the schedule (see also <u>Chapter 4.4.1</u>). Or click **All** to select all. To store the setting, click **Save**. To remove the settings, click **Clear**.
- To end Schedule Setting, click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.



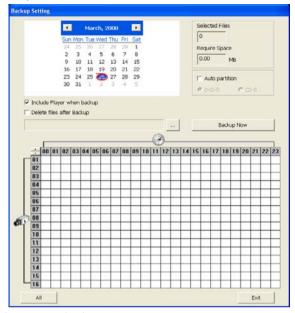
4.4.1 To set schedule at a specific portion of time in that hour:

- 1. Right click the colored blocks.
- In the Select time dialog box, click to enable or disable the portion you want to set.
- 3. Click **OK** to accept the setting and **Cancel** to exit without saving the setting.

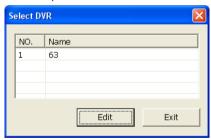


4.5 Backup Setup

In the Backup Setting dialog box, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera number.



1. Select the DVR that wants to backup



- 2. Select the date of the recorded file in the calendar you want to backup. Use 1 and 1 buttons to shift the calendar to the left or right.
- 3. In the table below, click on the blue block to select the recorded file or click camera (01~16) or time (00~23) to select the whole row or column. The blue block turns red when it is selected. The block that appears in white doesn't have data. If you want to set the specific time, right-click on the selected block. Then, set the time to start and end.
- 4. Check the information beside the calendar.

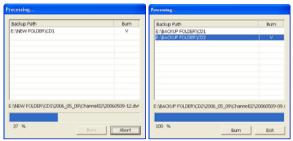
Selected Files: Show the number of files selected.

Require Space: Show the total size of the selected file.

- Enable Auto partition and select to divide the file size into DVD-R or CD-R. NV DVR automatically backup and divide the file sizes to facilitate burning into DVD or CD disc.
- Enable Include player when backup that will included a Qplayer program for playback backup file in backup folder when backup. Only administrator user has the authority to enable or disable

this function.

- If you do NOT want to keep the recorded file in the storage folder, enable Delete files after Backup check box.
- 8. Click to set the path on where to store the backup file.
- 9. Click Backup Now to start archiving the selected file.
- 10. In the Processing... dialog box, to stop archiving press Abort. When done, in the Backup Path list, shows the archived item. To burn the file in CD, you need to have NERO 6 or above installed in your PC then select the item in the list and click Burn. Click Exit to end this procedure and burn it later.



11. In CD/DVD Backup, enable/disable Delete file after burning check box to remove the archived file after burning. Click **Burn** to start and **Exit** to cancel this process.



4.6 E-MAP Setup

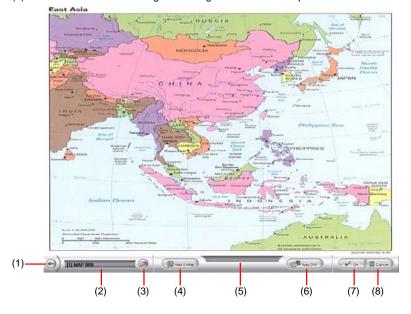
Holds up to 64 maps in *.bmp/*.jpg format. The map is hierarchy in structure and users can add a map on another map. User also may add the DVR icons on the map.

4.6.1 To Set Up the E-Map

- 1. Click Setup.
- 2. In the Authorization dialog box, enter the administrator User ID and Password.



- Click E-Map.
- 4. The E-Map interface will show up in assigned monitor if user is using multiple monitors for the CMS system. If user is using single monitor for the CMS application, the E-Map interface will show up in front of the CMS application interface. Press **Esc** or click **Center** button to switch back to CMS application interface or press **F3** to switch to E-Map interface again.
- 5. On the E-Map interface:
 - (1) go back to previous layer of map
 - (2) Show the current name and layer of map
 - (3) Load a map to replace the current map
 - (4) Add a new map. The new map is added on the current map as a next level.(See 4.4.1.1)
 - (5) Display the selected Map or DVR server information.
 - (6) Add a DVR server icon on the map. (See 4.4.1.2)
 - (7) Click **OK** to save the setting and exit the E-Map interface.
 - (8) Click **Cancel** without saving the setting and exit the E-Map interface.



4.6.1.1 Add a New Map

- 1. Click setup button
- 2. In the Authorization dialog box, enter the administrator User ID and Password
- 3. Click E-Map button
- 4. Click Add Map button and the Map setting window will show up.



- 5. Give a name for the new map.
- 6. Click ____ to locate the map file. In the open dialog box, locate and select the map and click Open
- 7. User may now drag and move the Map icon to its place on the map.
- 8. User can double click the Map icon to view the map.
- 9. To edit and delete the map, click the map icon and **Edit** and **Delet**e button will appear on the Map interface. Click **Edit** to modify the map (see <u>4.4.1.1 # 5~6</u>). To delete the map, click the map icon and click **Delete** button.
- 10. Click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.



- User can add up to a total of 64 maps
- User also can right click the mouse button on the map, a function list window will show up. User can select the function to add and modify the map.



4.6.1.2 Add a DVR Server

- 1. Click setup button
- 2. In the Authorization dialog box, enter the administrator User ID and Password
- 3. Click E-Map button
- 4. Click Add DVR button and the Add DVR window will show up.
- 5. Select the DVR server from the Add DVR window and click OK.



- 6. User may now drag and move the DVR icon to its place on the map.
- To edit and delete the DVR server on the map, click the DVR server icon and the Edit and
 Delete buttons will appear on the Map interface. Click Edit to modify the DVR server (see 4.2.1 #
 5~10). To delete the DVR server from the map, click the DVR server icon and click Delete.
- 8. Click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.



User also can select the DVR icon and right click the mouse button on the map, a function list window will show up. User can select the function to add, edit, and delete DVR, edit map, reset Alarm, and view and control remote I/O devices status.



4.6.2 To Use the E-Map

When the alarm has been activated, the DVR icon blinks and turns red.

On the CMS main application, click E-map or press F3.



- Click the DVR server icon and a DVR watch window will show up and connect the DVR server to play the live video.
- 3. To stop the DVR server icon from blinking, right click the mouse button and select **Reset Alarm** or **Reset Alarm (all)**. The DVR server icon will stop blinking.
- 4. To switch back to the main application, press ESC.
- 5. To setup the E-Map, click button or right click the mouse button and select **E-Map** setup and the E-Map interface will switch to the E-Map setup mode. (see <u>4.4.1</u>)



- If user uses dual monitor, the E-map setup mode is active in E-Map windows and the E-map setup mode will not enable to active in CMS main screen.
- To switch back the setup mode in CMS main application, click OK or Cancel to exit the setup mode in E-Map interface.
- 6. User can click the Map icon on the map to view the map. And the map can be added map on map and up to 64 maps. (see 4.4.1.1).

4.7 Alarm Setting

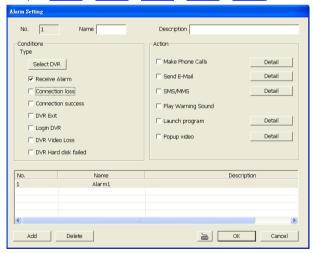
In the **Alarm Setting** dialog box, just select and enable the condition for the system to alarm and the action for the system to perform when an alarm is activated. User can setup a total of 16 different combinations of alarm settings. Each alarm setting can apply to several DVR servers. Click **OK** to accept new setting and **Cancel** to exit without saving.

4.7.1 To setup an alarm condition

- 1. Click the **Add** button to add a new alarm condition.
- 2. Give the name of this alarm condition.
- 3. Fill the simply description of this alarm condition in **Description** column.
- Apply to the DVR server, click Select DVR. In Select DVR window, select the DVR server and click Add. To exit and save the setup, click OK.



- Select the Conditions.
- 6. Select the **Action**.(see 4.5.1.1 & 4.5.1.2 & 4.5.1.3 & 4.5.1.4 & 4.5.1.5)



7. Click **OK** to save the setting. To cancel click **Cancel**.

4.7.1.1 To Setup the Call Out List

To use this feature, the PC must have a voice modem connected to it. The supported audio system is only 8KHz and 16Bit mono.

- 1. Beside the Make Phone Calls check box, click **Detail**.
- 2. In the Call Out List, click Add to insert a new contact number, Modify to edit the selected item, Remove to delete the selected item, Test to check if it is working.



3. In the Call Out Setting, enter the phone number and description. Click to select existing recorded sound and Record to make a new voice message.

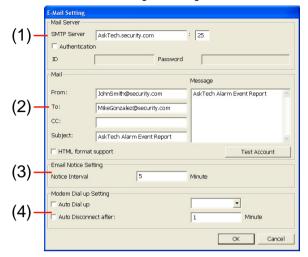


- 4. When the Sound Recorder appears, use the record control panel to record, stop, play, rewind and forward. If you want to keep the existing file, click File > Save As..., enter filename and click Save. Make sure you have microphone connected to your PC.
- 5. Click OK to exit and accept the setting and Cancel to exit without saving the setting.
 - 0

To use make phone call function, please make sure you deselect the option "wait for dial tone before dialing" in modem properties in control panel of your Windows OS.

4.7.1.2 To Setup the Send E-Mail Setting

Beside the Send Email check box, click Detail. In the E-mail Setting dialog box, click OK to exit and save the setting and Cancel to exit without saving the setting.



(1)Mail Server

Enter the SMTP Server and port. If your e-mail system requires user identification, enable the Authentication check box and enter User ID and Password.

(2)Mail

To check if it is working, click the Test Account button.

From: Enter the sender e-mail address.

To and CC: Enter the recipient email address and separate it with comma or a semicolon (;).

Subject: Enter the message title. **Message:** Type the message.

(3)Email Notice Setting

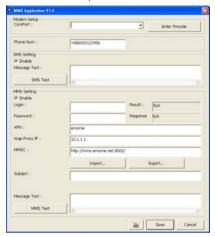
In the Notice Interval text box, set the period of time before it sends another e-mail notice.

(4) Modem Dial up Setting

If you are using dial up modem, enable Auto Dial up check box and select the modem name. You may also set the time to disconnect automatically, just enable the Auto Disconnect after check box and set the time.

4.7.1.3 To Set the MMS/SMS Setting

To use this feature, GSM/GPRS modem is required. Connect the GSM/GPRS modem to the serial COMM port of PC. Beside the SMS/MMS check box, click **Detail**.



- Select the port number in ComPort drop down list from where the GSM/GPRS modem is connected.
- Click Enter Pincode button to fill in pin code of your mobile phone if your mobile system require verifying pin code for SMS/MMS sending.



The incorrect pin code will lock your mobile phone.



- 3. In **Phone Num** text box, enter the contact number.
- You may now set to send thru SMS &/or MMS. If you enable SMS setting, just enter the
 message in the Message Text box. Click SMS Test to verify the SMS setup is available.
- If you enable MMS, enter the Loing account, Password, APN name, WAP IP, MMS address, subject of MMS message and the message. User can Import the previous MMS setting or Export the current MMS setting. If you are not sure, please contact your mobile service provider. To verify the setting, click MMS Test.
- 6. Click **OK** to accept the new settings and **Cance**l to exit without saving.

4.7.1.4 Launch program

To call up the external program that is provided by a 3rd party. Click Detail and click ____ to locate the program path. Enable the **Multiple instance** check box if the external application has been programmed to execute repeatedly.



4.7.1.5 Popup Video

The Popup video will co-work with alarm condition of **Receive Alarm**. When user selects the alarm condition of Receive Alarm, and then the action of Popup video will be un-gray and available for select. The popup video will show up 4 windows at once.



On the upper right corner of popup video windows, there two figures that are to represent nailed popup video windows and mini center function.



(a)To call out DVR watch window. The DVR watch window will display the DVR all channels' video image.



- (b) To nail popup video window for avoiding new coming alarm video to replace it.
- (c) To call out MiniCenter(also see Chapter 3.3)

To Setup Popup Video:

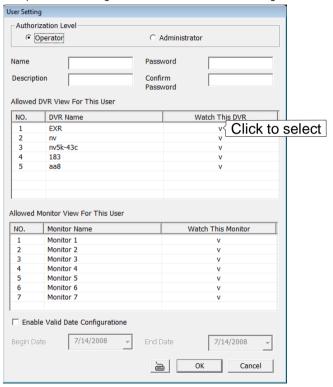
- 1. Click Detail to call up Alarm Display Selection windows.
- 2. Select the type of popup video
 - Static View: The DVR server only transmits one frame of video and popup on CMS site.
 - Live View: The DVR server will continue to transmit video to CMS site while popup video window is open.
- 3. To close popup video windows, just click "X" of windows.



4.8 User Setting

CMS supports 256 user account that includes operator and administrator account.

- Select the Authorization Level Operator or Administrator. User can define each operator/administrator account's authority of DVR server and Monitor set. Only the administrator is authorized to close and customize the CMS system.
- 2. Enter the Name, Description, Password, and Confirm password of the account.
- Select the DVR servers that allow this account user to preview and playback. The DVR server with check mark means is selected.
- Select the Monitor set that allow this account user to view. The Monitor set with check mark means is selected.
- User can assign a valid date for Operator user. Select Being Date and End Date to assign a valid date for operator account. The account only will be available during the assigned date.
- 6. Click **OK** to accept the new settings and **Cancel** to exit without saving.



Chapter 5 Using the Playback Function

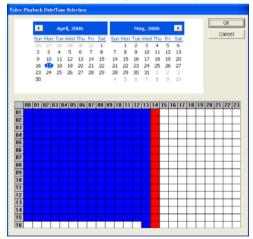
User can choose to playback video stored on the local hard disk or download the video from the remote side of the DVR server.

5.1 To Playback the video

- 1. Click A Poytoca
- In the DVR Playback select window, select DVR server and Local Playback to play video from the local hard disk or Remote Playback from the remote DVR server.



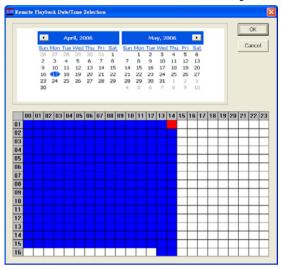
3. For Local Playback, user can select to preview 16 channels at a time. <u>Only the cameras previously selected in Monitor and with the Record button enabled /recorded_can be recorded.</u> In the Video Playback Date/Time Selection, the numbers from 00 to 23 represent the time in 24-hour. The numbers from 01 to 16 represent the camera number. The blue block indicates that there is a recorded video file in that period of time. While the red bar indicates the selected recorded video for viewing (see also <u>5.2 Using the Local Playback Application).</u>



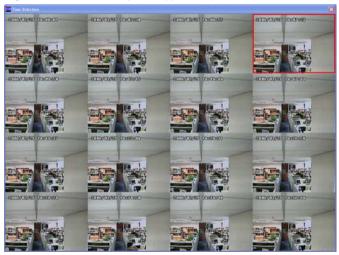
 For Remote Playback, you can select Download and playback or RealTime playback. Click OK to proceed and Cancel to void this operation.



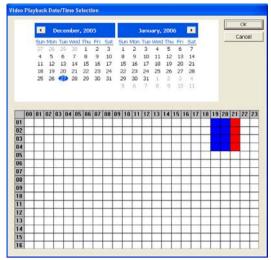
5. For Download and Playback, the numbers from 00 to 23 represent the time in 24-hour in the Remote Playback Date/Time Selection windows. The numbers from 01 to 16 represent the camera number. The blue block indicates that there is a recorded video file on that period of time. While the red block indicates the selected recorded video for viewing.



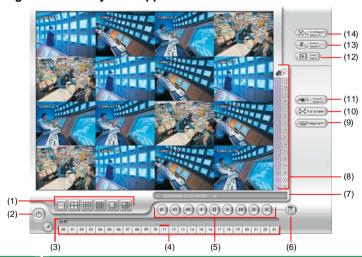
6. In the Time Selection screen, click on the video thumbnail you want to download and open (see also 5.3 Using the Download and Playback Application).



7. For RealTime Playback, the number from 00 to 23 represent the time in 24-hour clock in the Video Playback Date/Time Selection windows. The numbers from 01 to 16 represent the camera number.(see 5.4 Using the RealTime Playabck Application)



5.2 Using the Local Playback Application



Name

Function

(1) Split Screen Mode Select from six (6) different split screen types to playback the recorded video file of all the cameras, or one camera over the other or alongside on a single screen.



- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To zoom into an area on the screen, Right click and Drag a square on the area you want to enlarge.
- To view 32 channels, click 16 split screen mode button to view 16 channels each time.
 Check the camera ID icon to know which channels are displaying now.

(2) Exit	Close the Player.
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at

Name	Function
	any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
(5) Playback Control Buttons	Begin: Move to the beginning of the recorded video file. Previous: Go back to the previous frame. Slower: Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x. Rewind: Wind back the recorded video file. Pause: Briefly stop playing the recorded video file. Play: Play the recorded video file. Faster: Play the recorded video file at the speed of 2x, 4x, or 8x, 16x, 32x. Next: Go to the next frame. End: Go to the end of the recorded video file.
(6) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
16 represe video file o	ers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to ent the camera ID. The blue colored column indicates that there is a recorded on that period of time. While the red colored column indicates on where to start a recorded video file.
(7) Status bar	Display the recorded date, time and play speed.
(8) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(9) Segment	Keep a portion of the recorded video you want (see also <u>5.5</u>).
(10) Full screen	View in Playback-compact mode. To return, Right click the mouse or press ESC on the keyboard. When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.
(11) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second (See also <u>5.6</u>).
(12) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search only.
(13) Event Search	Search from the recorded activities that take place in the system (i.e., Sensor, Motion, Video Loss, POS) (See also <u>5.7</u>).
(14) Intelligent Search	Search the changes in the motion detector frame (See also <u>5.8</u>).

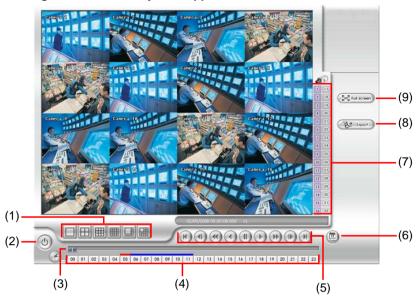
5.3 Using the Download and Playback Application



Name	Function
(1) Exit	Close the player
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Date	Open other file.
(4) Playback Control Buttons	Begin: Move to the beginning of the recorded video file. Previous: Go back to the previous frame. Slower: Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x.
	Rewind: Wind back the recorded video file.
	Pause: Briefly stop playing the recorded video file.
	Play: Play the recorded video file. Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x. Next: Go to the next frame. End: Go to the end of the recorded video file.
(F) OID	
(5) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(6) Export	 Export includes Snapshot, Print, Output Video Clip, and Backup function. Snapshot: Capture and save the screen shot either in *.jpg or *.bmp format. Print: Print the screen shot. Output Video Clip: Save the segmented file in *.mpg, *.avi, or *.dvr format
	(see also <u>5.5</u>).
(7) Segment	Keep a portion of the recorded video you want. You may follow the instruction in <u>5.5</u> .
(8) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard.
	When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.

Name	Function
(9) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (See also <u>5.6</u>)
(10) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search function.
(11) Event Search	Search from the recorded activities that take place in the system (i.e., Sensor, Motion, Video Loss, POS) (See also <u>5.7</u>).
(12) Intelligent Search	Search the changes in the motion detector frame (See also <u>5.8</u>).

5.4 Using the RealTime Playback Application



Name Function (1) Split Screen Mode Select from two (6) different split screen type to playback the recorded video file of all the camera, or one camera.



- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To zoom in an area on the screen, Right click and Drag a square on the area you want to enlarge.

(2) Exit	Close the player
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.



The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.

(5) Playback
Control Buttons

Begin: Move at the beginning of the recorded video file.
Previous: Go back to the previous frame.
Slower: Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x.

Rewind: Wind back the recorded video file.
Pause: Briefly stop playing the recorded video file.
Play: Play the recorded video file.
Faster: Play the recorded video file at the speed of 2x, 4x, or 8x, 16x or 32x.

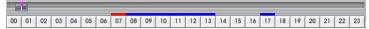
Next: Go to the next frame.

End: Go to the end of the recorded video file.

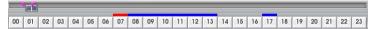
Name	Function
(6) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
16 repres	pers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to ent the camera ID. The blue colored column indicates that there is a recorded on that period of time. While the red colored column indicates on where to ing the recorded video file.
(7) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(8) Export	Snapshot: Capture and save the screen shot either in *.jpg or *.bmp format.
(9) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.

5.5 To Cut and Save the Wanted Portion of the Recorded Video

1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.



2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation or set the segment marks from the start, click **Segment** button again.



- 3. Click **Output** button to save the wanted clip.
- 4. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video format.



5.6 To Search Using the Visual Search

- 1. Click Visual Search.
- 2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click **OK**.



3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every Minute of that hour, every 10 Seconds of that minute, every Second of that 10 seconds. To go back, click _____. To view from the selected frame and close event search, click _____.

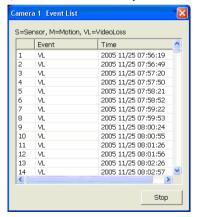


5.7 To Search Using the Event Search

- 1. Click on the video screen on where you want to search.
- Click Event Search. The Event Search text (red) would appear at the lower left corner of the screen.



- 3. In the **Event Search Setting** dialog box, check the type of condition you want to search. If you select POS, in the Find Text box, type the word. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching, click **Eliza**).
- You may also set to search and list all the result. Just check the Output Event List box. In the Search Duration section, set the Begin Time, End Time and Searching Interval. Then, click OK to start searching.
- 5. When the Event list appears, click and select the item you want to view.



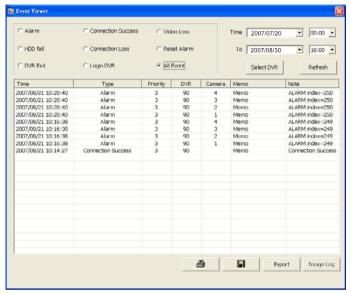
5.8 To Search Using the Intelligent Search

- 1. Click on the video screen on where you want to search.
- Click Intelligent Search. The Intelligent Search text (red) would appear at the lower left corner of the screen.
- 4. You may also set to search and list all the result. Just check the **List** box. In the Search Duration section, set the **Begin Time**, **End Time** and **Searching Interval**. Then, click **OK** to start searching.



Chapter 6 Using the Event Viewer

Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Alarm, Motion, DVR Reboot, HDD fail, Login DVR, Connection Success, Connection Loss, Reset Alarm, DVR Exit, Login DVR or All Event. Click **Refresh** to update the list and **Export** to output the event search result in *.excel format.



To view image logs, click Image Log button. The image log windows will display. Double click on the image log to view more details.

